



Cypress Creek: Watershed Protection Plan

Water Body	Cypress Creek (Seg 1815)
Location	Hays County
River Basin	Guadalupe River (18)
Contractor	Texas State University-River Systems Institute (RSI)
Project Period	January 8, 2008 to August 31, 2013
Project Total	\$702,072 (Federal 60% and Local Match 40%)

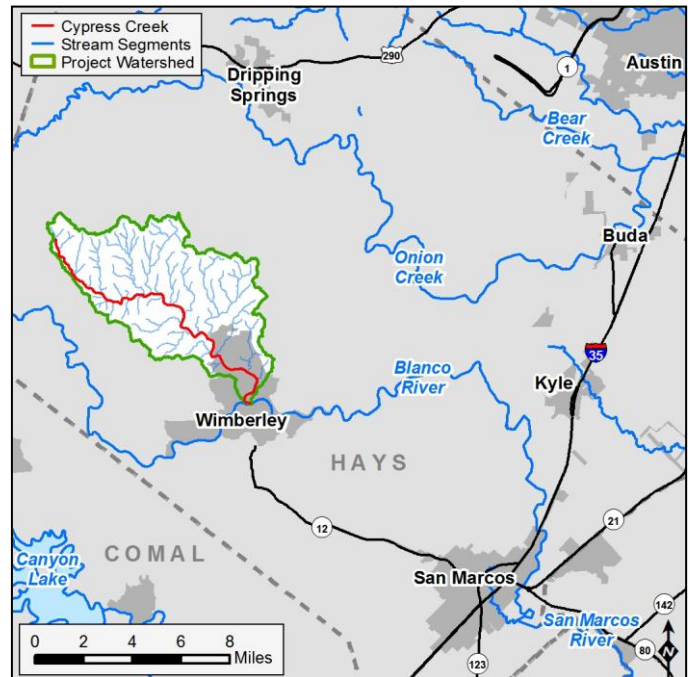
Background

Cypress Creek originates in western Hays County and flows into the Blanco River. About five and a half miles upstream of the confluence, near the City of Woodcreek, is Jacob's Well, the headwaters of Cypress Creek. This artesian spring is considered the lifeblood of the community as it perennially feeds water from the Trinity Aquifer to the lower third of the creek. The Cypress Creek watershed is home to a unique set of rural and urban communities and distinctive ecosystems. The area has a long-standing reliance on groundwater for drinking, recreational activity, and in maintaining aquatic life uses. Stakeholders have determined that a watershed protection plan (WPP) is one of the many tools they will use to keep Cypress Creek clean, clear, and flowing. The RSI at Texas State University–San Marcos is helping to guide the development of the WPP.

Issues of concern include excess sediment in the creek, high bacteria concentrations, and occasionally high nutrient levels. Characterization results show that flow is a critical factor for maintaining adequate oxygen levels and a highly functioning aquatic community. Analysis indicates the upper portions of the watershed tend to be highly influenced by inflow of groundwater in terms of the water chemistry, while downstream sites show more of an influence by local stream conditions and runoff from contributing subwatersheds.

WPP Development

The Cypress Creek WPP is being developed in two phases: Phase I and Phase II. Phase I was completed in November 2010 and involved the development of a stakeholder advisory group, watershed characterization report, and decision support system (DSS). The framework of the DSS is a series of computer models that represents the natural system. It includes tools for developing and evaluating scenarios taking into account social drivers, climatic drivers, and current (or proposed) management practices.



Phase II builds upon work completed in Phase I and completes the development of a nine-element WPP document. In addition to building and expanding upon work completed under Phase I, watershed goals and numeric water quality targets have been established along with an implementation schedule for proposed management measures. A plan to monitor water quality changes and evaluate the effectiveness of the implementation measures has also been developed.

Current Status

Contract closed August 31, 2013. The Watershed Protection Plan was submitted and is awaiting approval.

Public Participation

Visit the Cypress Creek website for events and information. <http://cypresscreekproject.squarespace.com/>

For More Information

TCEQ Project Manager

Arthur Talley
512.239.4546; Arthur.Talley@tceq.texas.gov

Texas State University-RSI

Chris Clary
512.245.8570; chrisclary@txstate.edu

WPP Development Status

Start Date: January 2008

Projected End Date: 2013

TCEQ Approval:

EPA Approval:

WPP Highlights

- **01/08/2008** – The Phase I contract was signed with TCEQ.
- **03/06/2008** – An official website for the Cypress Creek Project was developed.
- **02/03/2010** – The Phase I monitoring quality assurance project plan (QAPP) was approved.
- **09/15/2010** – The DSS user manual was created.
- **09/22/2010** – The EPA approved funding for Phase II.
- **11/08/2010** – The characterization report was approved and the Phase I grant was closed.
- **06/28/2011** – The Phase II contract was signed with TCEQ.
- **10/05/2011** – Modeling QAPP was submitted.
- **11/23/2011** – First newsletter of phase II was sent to stakeholders.
- **04/04/2012** – Project kickoff meeting.
- **05/10/2012** – 2nd stakeholder meeting and initiation of BMP selection for the WPP.
- **06/21/2012** – 3rd stakeholder meeting and continuation of BMP selection for the WPP.
- **08/2012** – Stakeholder committee concluded the BMP selection process.
- **11/2012** – Modeling QAPP approved.
- **05/2013** – Water quality modeling began.
- **04/2014** – Watershed Protection Plan submitted for approval.
- **10/2014** – Resubmitted WPP with EPA comment responses